

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Appellant **Perdon et al.** Attorney Docket No. **109.635.144**
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For: **PREDICTING THE ACTIVITIES OF AN INDIVIDUAL OR GROUP USING MINIMAL INFORMATION**

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SIR:

APPEAL BRIEF

Appellant submits this Appeal Brief to the Board of Patent Appeals and Interferences on appeal from the decision of the Examiner of Group Art Unit 2623 dated July 5, 2006 finally rejecting claims 1-12, 14-33, 35-44 and 46-57.

In the event that an extension of time is required for this appeal brief to be considered timely, and a petition therefor does not otherwise accompany this appeal brief, any necessary extension of time is hereby petitioned for.

The Commissioner is authorized to charge the Appeal Brief fee (\$500) and any other fees due to make this filing timely and complete (including extension of time fees) to Deposit Account No. 20-0782/SEDN/PRED144.

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Real Party in Interest

The real party in interest is SEDNA PATENT SERVICES, LLC.

Related Appeals and Interferences

Appellant asserts that no appeals or interferences are known to Appellant, Appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of Claims

Claims 1-12, 14-33, 35-44 and 46-57 are pending in the application. Claims 1-58 were originally presented in the application. Claims 13, 34, 45 and 58 are cancelled. Claims 1-12, 14-33, 35-44 and 46-57 stand finally rejected as discussed below. The final rejection of claims 1-12, 14-33, 35-44 and 46-57 is appealed.

Status of Amendments

All claim amendments have been entered.

Summary of Claimed Subject Matter

Embodiments of the present invention generally are directed to a method and system for predicting the behavior of an individual based on a comparison of the individual's activities during an online session with those participated in by multiple other parties. The individual's activities during the session and certain attendant conditions are monitored and compared with a continually updated database that reflects (a) the cumulative activities of all other parties and their attendant conditions and (b) behavioral trends exhibited by those other parties based on their participation in various types of activities under various conditions. When similarities are detected between the individual's activities and their attendant conditions and those of certain other parties, the corresponding behavioral trend of those other parties is attributed to the individual. The method and system are implemented in connection with an interactive service for initiating delivery of informational content targeted to that individual. (*e.g., Abstract and Summary of Invention.*)

For the convenience of the Board of Patent Appeals and Interferences, Appellant's independent claims 1, 17, 22, 35, and 46 are presented below in claim format with elements read on the various figures of the drawings and appropriate citations to at least one portion of the specification for each element of the appealed claims.

Claim 1 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

1. (Previously presented) A method of predicting the behavior of a current user of an interactive television service (*e.g., p.17, line 25 to p.18, line 10*), comprising the steps of:

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions

surrounding each such activity; *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming; *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)* and

attributing, by a set top box, to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior. *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

Claim 17 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

17. (Previously presented) A method of predicting the behavior of a user of an interactive television service, during a particular period of engagement with the interactive television service, comprising:

identifying, by a set top box, activities in which the user participates during the period of engagement, and conditions surrounding each such activity, the activities including viewing interactive television programming; *(e.g., p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

identifying, by a set top box, the activities of multiple other contemporaneous users of the interactive television service during the same period of engagement, and conditions surrounding such activities; *(e.g., p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

maintaining, by a set top box, a first collection of data that includes data reflecting both the user's and the other contemporaneous users' cumulative activities identified during the period of engagement, and conditions surrounding such cumulative activities; *(e.g., p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

determining, by a set top box, from such first collection of data, patterns of behavior exhibited by such user's and the other contemporaneous users' participation in activities during the period of engagement; *(e.g., p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

incorporating, by a set top box, into the first collection of data, data reflecting such determined patterns of behavior; *(e.g., p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

comparing, by a set top box, (i) the user's present activities and surrounding conditions and (ii) the cumulative activities and surrounding conditions as reflected in such first collection of data, to identify similarities therebetween; *(e.g., p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

attributing, by a set top box, to the user a pattern of future behavior based on such similarities and on the previously determined patterns of behavior. *(e.g., p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

Claim 22 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

22. (Previously presented) A method of delivering targeted informational content to a current user of an interactive television service, comprising:

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity; *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, (*e.g.*, *p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10*) and (iii) preferences exhibited by such other users through their participation in such cumulative activities, (*e.g.*, *p.9, lines 2-12 and p.12, lines 18-29*) the activities including viewing interactive television programming; (*e.g.*, *p.17, line 25 to p.18, line 10*)

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; (*e.g.*, *p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10*)

attributing, by a set top box, to the current user a preference profile based on such similarities and on the other users' preferences; (*e.g.*, *p.5, lines 2-13; p.5, line 24 to p.6, line 11; p.14, lines 1-11; p.14, line 26 to p.15, line 22; and p.17, line 25 to p.18, line 10*) and

generating, by a set top box, an ordered list of informational content to be selectively delivered to the current user based on the preference profile. (*e.g.*, *Fig. 3, step 56 and p.16, line 12 to p.17, line 10*)

Claim 35 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

35. (Previously presented) A computer-readable medium having stored thereon instructions for predicting the behavior of a current user of an interactive television service which, when executed by a processor, cause the processor to perform the steps of:

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity; (*e.g.*, *p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10*)

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming; *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)* and

attributing, by a set top box, to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior. *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

Claim 46 positively recites (with reference numerals, where applicable, and cites to at least one portion of the specification added):

46. (Previously presented) Apparatus for predicting the behavior of a current user of an interactive television service, comprising:

means for identifying each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity; *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

means for accessing a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming; *(e.g., p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)*

means for comparing (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; (*e.g.*, p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10) and

means for attributing to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior; (*e.g.*, p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)

a set top box including a content delivery service and a user monitor, the set top box enabling communication between the current user and a head end, the user monitor including the means for identifying, the means for accessing, the means for comparing, and the means for attributing. (*e.g.*, p.5, lines 2-13; p.5, line 24 to p.6, line 11; and p.17, line 25 to p.18, line 10)

Grounds of Rejection to be Reviewed on Appeal

The Examiner has rejected claims 1-12, 14-33, 35-44 and 46-57 under 35 U.S.C. §103(a) as being unpatentable over Herz U.S. 6,029,195 (hereinafter "Herz") in view of Rooney U.S. 6,819,669 (hereinafter "Rooney").

ARGUMENTS

Rejection Under 35 U.S.C. §103(a)

The Examiner has rejected claims 1-12, 14-33, 35-44 and 46-57 under 35 U.S.C. §103(a) as being unpatentable over Herz in view of Rooney.

Claims 1-12, 14-33, 35-44 and 46-57

The Examiner has rejected claims 1-12, 14-33, 35-44 and 46-57 under 35 U.S.C. §103(a) as being unpatentable over Herz in view of Rooney. Applicants respectfully traverse the rejection.

Applicants' independent claim 1 recites, in part:

"accessing, by a set top box, a first collection of data that reflects

(i) cumulative activities in which other users have participated,

(ii) conditions surrounding such other users' cumulative activities, and

(iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; and

attributing, by a set top box, to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior.

Each of independent claims 17, 22, 35, and 46 also recites similar relevant limitations.

Applicants disagree with the Advisory Action that Herz discloses the claimed accessing, by a set top box, a first collection of data that reflects "(i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative

activities, the activities including viewing interactive television programming," and subsequently attributing a pattern of future behavior of the current user based on similarities between the current user's activities and other users' cumulative activities, as well as other users' patterns of behavior, as set forth in claim 1.

Regarding the claimed accessing, by a set top box, a first collection of data that reflects features listed under (i), (ii) and (iii) of claim 1, the Examiner cited Herz for disclosing browsing large article collections (Herz, col. 3, line 39), target objects being published articles, purchasable items, or even other people (Herz, col. 6, lines 22-25) and activities including viewing interactive television programming (Herz, col. 90, lines 10-22).

Applicants submit that Herz's teachings should be considered in their respective contexts. For example, Herz teaches that other people/users can be considered target objects in the context of a user who is a sender of email looking for other appropriate users to correspond with, based on previous messages that they have received, read and responded to (e.g., col. 6, lines 25-38). The portion of Herz cited as relevant to viewing interactive television programming relates to a scenario of matching users according to their common interest in a multi-user application that can be jointly interacted with or jointly viewed passively via PC or TV. That is, other users are relevant only in a narrow context as identifying other users as potential recipient of emails or participants in a joint activity.

Herz does not teach or suggest at least the combination of accessing a collection of data that reflects cumulative activities that other users have participated, conditions surrounding such other users' cumulative activities, and patterns of behavior exhibited by such other users through their participation in such cumulative activities, then using this data to identify similarities between the activities and surrounding conditions for the current user and other users, and attributing a pattern of future behavior to the current user based on other users' patterns of behavior.

Instead, Herz discloses matching users who share a high level of interest in particular multi-user applications or the particular type of content in those multi-user applications (Herz, col. 89, lines 25-27). Specifically, users are “matched according to their common interest in a type of application which can be jointly interacted with or jointly viewed passively” (Herz, col. 90, lines 10-22). This is not the same as the claimed invention. The common interest in Herz is in an application that can be jointly interacted with or jointly viewed passively. By contrast, the claimed invention collects data on patterns of behavior of users in their respective cumulative activities, not joint activities. The claimed invention compares data about the current user with other users doing similar things, not the current user jointly engaging in activities with other users.

Applicants also disagree with the Advisory Action's position that Herz col. 7, lines 9-18 discloses the claimed features of comparing (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween.

Specifically, col. 7, lines 9-18 discloses “a profile processing module which estimates each user's interest in various target objects by reference to the users' target profile interest summaries, for example by comparing the target profiles of these target objects against the search profiles in users' search profile sets”.

The Advisory Action equated Herz's target profiles of target objects to “the current user's identified activities and surrounding conditions” in Applicants' invention. Applicants disagree with this characterization of Herz.

Herz defines a “target profile” as a digitally represented profile indicating the target object's attributes, while a “target object” is an object available for access by the user, which may be either physical or electronic in nature (Herz, col. 4, lines 49-53). Herz also teaches that the attributes of a target object correspond to the individual data describing the target object, and examples of attributes include long pieces of text, short pieces of text, numeric measurements (e.g., price of a product or rating of a movie, etc.) or association with other types of objects (e.g., Herz, col. 6, lines 43-54).

That is, the attributes of the target object describe the nature, assessment or other properties of the object, but they are not the content of the target object. While there may be a relationship between the user's activities and the target object, e.g., the user may try to access the target object based on the user's interest in the content, the target profile itself is totally different from the user's identified activities.

Applicants also disagree with the Advisory Action equating Herz's search profiles in users' search profile sets to "the other users' cumulative activities and surrounding conditions" in Applicants' invention.

Specifically, Herz teaches that a "search profile" consists of a collection of attributes, such that a user likes target objects whose profiles are similar to this collection of attributes", and a user's search profile set is a specific embodiment of the target profile interest summary (i.e., a summary of digital profiles of target objects that a user likes and/or dislikes) that comprises a set of search profiles (Herz, col. 4, lines 55-61).

Thus, Herz's "search profiles" are not the same as other users' cumulative activities and surrounding conditions of Applicants' claimed invention, because activities are not attributes - attributes are generalized qualities, while activities are specific tasks.

Furthermore, Herz's search profile set for a user is based on target profiles of objects that the particular user likes and/or dislikes, but not based on or derived from other users' likes, dislikes or cumulative activities and surrounding conditions. As such, the Advisory Action is incorrect in equating the search profile sets in Herz to "the other users' cumulative activities and surrounding conditions" as taught in Applicants' invention.

Since Herz only teaches comparing target profiles against the search profiles, but not comparing activities and conditions between the current user and other users to attribute future behavior to the current user, Herz does not teach or suggest "comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and

surrounding conditions, to identify similarities therebetween", as recited in Applicants' claim 1.

Furthermore, Applicants disagree with the Final Office Action characterizing Herz's col. 48, lines 49-57 as disclosing the feature of "attributing to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior" recited in claim 1.

This portion of Herz relates specifically to "pre-fetching" or early retrieval of data before a user's request for such information, e.g., when navigating World Wide Web of a target object browsing system (Herz, col. 47, lines 62-66), by using aggregate statistics on past user behavior to predict future user behavior. As taught by Herz, "[i]n the context of the system for customized electronic identification of desirable objects, it is possible to cluster users into groups according to the similarity of their user profiles" (Herz, col. 48, lines 46-49). That is, a user profile, which contains user's attributes, e.g., age/zip code, etc. (Herz, col. 4, lines 54-55), provides the basis for clustering users into groups for the purpose of generalizing access pattern statistics from each user to similar users.

The attributes of a user are data describing the user (e.g., see the definition of attributes for a target object in col. 6, lines 43-45). They are different from data pertinent to Applicants' invention, which are activities identified for the current user, the cumulative activities and surrounding conditions of other users, or patterns of behaviors of users.

Thus, even if one were to consider Herz's pre-fetching of data based on statistics from a cluster of users as analogous to Applicants' feature of attributing a pattern of future behavior to the current user based on information from other users, the basis of each method is different, because Applicants' invention is based on similarities of activities and surrounding conditions of the current user and other users, which is not taught by Herz.

To sum up, Applicants' invention compares the current user's identified activities and surrounding conditions with other users' cumulative activities and surrounding conditions, and similarities identified in these activities and

surrounding conditions are used in conjunction with the other users' patterns of behavior to attribute a pattern of future behavior to the current user. These features are not taught or suggested in the cited portions of Herz.

Finally, the Rooney reference fails to bridge the substantial gap between the Herz reference and Applicants' invention. Rooney discloses that a set top box 104 is provided for allowing the user to interact with the program shown on the television set 102. (Rooney, col. 3, lines 64-66.) Rooney also fails to teach or suggest at least the claimed features of "comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween".

Since Herz fails to teach or suggest all the elements of claim 1 and Rooney fails to teach or suggest those missing elements, the combination also fails to disclose all the elements of claim 1.

Independent claims 17, 22, 35 and 46 also recite features similar to those discussed above for claim 1.

As such, Applicants submit that independent claims 1, 17, 22, 35 and 46 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

Furthermore, claims 2-12, 14-16, 18-21, 23-33, 36-44 and 47-57 depend, either directly or indirectly, from independent claims 1, 17, 22, 35 and 46 and recite additional limitations thereof. As such and at least for the same reasons as discussed above, the Applicants submit that these dependent claims are also non-obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, the Applicants respectfully request that the Examiner's rejection be withdrawn.

CONCLUSION

Thus, Appellant submits that none of the claims presently in the application are allowable under the provisions of 35 U.S.C. §103.

For the reasons advanced above, Appellant respectfully urges that the rejections of claims 1-12, 14-33, 35-44 and 46-57 are improper. Reversal of the rejections of the Final Office Action is respectfully requested.

Respectfully submitted,

12/28/06
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CLAIMS APPENDIX

1. (Previously presented) A method of predicting the behavior of a current user of an interactive television service, comprising the steps of:

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity;

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; and

attributing, by a set top box, to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior.

2. (Original) The method of Claim 1, wherein the step of identifying the conditions surrounding each of the current user's activities includes determining the amount of time that the current user participates in each activity.

3. (Original) The method of Claim 2, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

4. (Previously presented) The method of Claim 3, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

5. (Previously presented) The method of Claim 1, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

6. (Original) The method of Claim 1, wherein the other users are unrelated individual persons.

7. (Original) The method of Claim 1, wherein the other users are members of a group and the current user is identifiable as a potential member of that group.

8. (Original) The method of Claim 1, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

9. (Original) The method of Claim 1, further comprising the step of:
periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities.

10. (Previously presented) The method of Claim 9, wherein the step of periodically updating occurs in real time, during the current user's engagement with the interactive television service.

11. (Previously presented) The method of Claim 1, further comprising the step of:
accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and

wherein the step of attributing includes selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service.

12. (Previously presented) The method of Claim 1, wherein the interactive television service is accessed through the Internet, the current user's activities and the other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user.

13. (Cancelled)

14. (Original) The method of Claim 12, further comprising the step of: periodically updating the first collection of data to reflect the other users' visits to additional Internet web sites.

15. (Original) The method of Claim 14, wherein the step of periodically updating occurs in real time, during the current user's engagement with the service.

16. (Original) The method of Claim 12, further comprising the step of: accessing a second collection of data that reflects (i) a plurality of types of Internet web sites that are available for the current user to visit and (ii) information about each type of web site within such plurality that distinguishes it from the other types of web sites within such plurality; and

wherein the step of attributing includes selecting one or more types of web sites, from the plurality of types of web sites, which the current user is most likely to visit during the engagement with the service.

17. (Previously presented) A method of predicting the behavior of a user of an interactive television service, during a particular period of engagement with the interactive television service, comprising:

identifying, by a set top box, activities in which the user participates during the period of engagement, and conditions surrounding each such activity, the activities including viewing interactive television programming;

identifying, by a set top box, the activities of multiple other contemporaneous users of the interactive television service during the same period of engagement, and conditions surrounding such activities;

maintaining, by a set top box, a first collection of data that includes data reflecting both the user's and the other contemporaneous users' cumulative activities identified during the period of engagement, and conditions surrounding such cumulative activities;

determining, by a set top box, from such first collection of data, patterns of behavior exhibited by such user's and the other contemporaneous users' participation in activities during the period of engagement;

incorporating, by a set top box, into the first collection of data, data reflecting such determined patterns of behavior;

comparing, by a set top box, (i) the user's present activities and surrounding conditions and (ii) the cumulative activities and surrounding conditions as reflected in such first collection of data, to identify similarities therebetween;

attributing, by a set top box, to the user a pattern of future behavior based on such similarities and on the previously determined patterns of behavior.

18. (Original) The method of Claim 17, further comprising the step of:
continually updating the first collection of data, to reflect (i) the user's and the other contemporaneous users' participation in additional activities and (ii) the determination of new patterns of behavior based on such participation in additional activities; and

wherein the steps of comparing and attributing are performed, at any given point in time, in conjunction with the updated first collection of data.

19. (Previously presented) The method of Claim 18, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and

wherein the step of attributing includes selecting one or more activities, from the plurality of available activities, in which the user is most likely to participate during the period of engagement with the interactive television service.

20. (Previously presented) The method of Claim 18, wherein the interactive television service is accessed through the Internet, the user's and other contemporaneous users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the types of Internet web sites that the user and the other contemporaneous users have visited, (ii) the content of each type of Internet web site visited, and (iii) the amount of time spent at each type of Internet web site visited.

21. (Original) The method of Claim 20, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of types of Internet web sites that are available for the user to visit and (ii) information about each type of web site within such plurality that distinguishes it from the other types of web sites within such plurality; and

wherein the step of attributing includes selecting one or more types of web sites, from the plurality of types of web sites, which the current user is most likely to visit during the engagement with the service.

22. (Previously presented) A method of delivering targeted informational content to a current user of an interactive television service, comprising:

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity;

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) preferences exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween;

attributing, by a set top box, to the current user a preference profile based on such similarities and on the other users' preferences; and

generating, by a set top box, an ordered list of informational content to be selectively delivered to the current user based on the preference profile.

23. (Original) The method of Claim 22, wherein the step of identifying the conditions surrounding each of the current user's activities includes determining the amount of time that the current user participates in each activity.

24. (Original) The method of Claim 22, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

25. (Previously presented) The method of Claim 24, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

26. (Previously presented) The method of Claim 22, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

27. (Original) The method of Claim 22, wherein the other users are unrelated individual persons.

28. (Original) The method of Claim 22, wherein the other users are members of a group and the current user is identifiable as a potential member of that group.

29. (Original) The method of Claim 22, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

30. (Original) The method of Claim 22, further comprising the step of: periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities.

31. (Previously presented) The method of Claim 30, wherein the step of periodically updating occurs in real time, during the current user's engagement with the interactive television service.

32. (Previously presented) The method of Claim 22, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and

wherein the step of attributing a preference profile is based in part on those activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service.

33. (Previously presented) The method of Claim 22, wherein the interactive television service is accessed through the Internet, the current user's activities and the other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user.

34. (Cancelled)

35. (Previously presented) A computer-readable medium having stored thereon instructions for predicting the behavior of a current user of an interactive television service which, when executed by a processor, cause the processor to perform the steps of:

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity;

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; and

attributing, by a set top box, to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior.

36. (Original) The computer-readable medium of Claim 35, wherein the instruction that causes the processor to perform the step of identifying the conditions surrounding each of the current user's activities causes the processor to perform the step of determining the amount of time that the current user participates in each activity.

37. (Original) The computer-readable medium of Claim 36, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

38. (Previously presented) The computer-readable medium of Claim 37, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

39. (Previously presented) The computer-readable medium of Claim 35, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

40. (Original) The computer-readable medium of Claim 35, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

41. (Original) The computer-readable medium of Claim 1, having stored thereon further instructions which, when executed by the processor, cause the processor to perform the step of:

periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities.

42. (Previously presented) The computer-readable medium of Claim 41, wherein the instructions that cause the processor to perform the step of periodically updating cause it to do so in real time, during the current user's engagement with the interactive television service.

43. (Previously presented) The computer-readable medium of Claim 35, having stored thereon further instructions which, when executed by the processor, cause the processor to perform the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and

wherein the step of attributing includes selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service.

44. (Previously presented) The computer-readable medium of Claim 35, wherein the interactive television service is accessed through the Internet, the current user's activities and the other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user.

45. (Cancelled)

46. (Previously presented) Apparatus for predicting the behavior of a current user of an interactive television service, comprising:

means for identifying each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity;

means for accessing a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

means for comparing (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; and

means for attributing to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior;

a set top box including a content delivery service and a user monitor, the set top box enabling communication between the current user and a head end, the user monitor including the means for identifying, the means for accessing, the means for comparing, and the means for attributing.

47. (Original) The apparatus of Claim 46, wherein the means of identifying the conditions surrounding each of the current user's activities includes means for determining the amount of time that the current user participates in each activity.

48. (Original) The apparatus of Claim 47, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

49. (Previously presented) The apparatus of Claim 48, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

50. (Previously presented) The apparatus of Claim 46, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service.

51. (Original) The apparatus of Claim 46, wherein the other users are unrelated individual persons.

52. (Original) The apparatus of Claim 46, wherein the other users are members of a group and the current user is identifiable as a potential member of that group.

53. (Original) The apparatus of Claim 46, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity.

54. (Original) The apparatus of Claim 46, further comprising:
means for periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities.

55. (Previously presented) The apparatus of Claim 54, wherein the means for periodically updating operates in real time, during the current user's engagement with the interactive television service.

56. (Previously presented) The apparatus of Claim 46, further comprising:
means for accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii)

information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality; and

wherein the means for attributing includes means for selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service.

57. (Previously presented) The apparatus of Claim 46, wherein the interactive television service is accessed through the Internet, the current user's activities and the other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user.

58. (Cancelled)

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDIX

None.